

Title (en)
LEADING EDGE PROTECTION SHIELD

Title (de)
VORDERKANTENSCHUTZSCHILD

Title (fr)
BOUCLIER DE PROTECTION DE BORD D'ATTAQUE

Publication
[EP 435545 A1 20240424 \(EN\)](#)

Application
[EP 22735775 A 20220616](#)

Priority

- DK PA202170309 A 20210618
- DK 2022050128 W 20220616

Abstract (en)

[origin: WO2022262921A1] In a first aspect of the invention there is provided a method of forming a leading edge protection shield on a wind turbine blade shell. The method comprises providing at least a portion of a wind turbine blade shell comprising a windward surface, a leeward surface, and a leading edge, providing a leading edge mould comprising a concave curved mould surface and arranging the mould over the leading edge of the blade shell such that a generally C-shaped cavity is defined between the blade shell and the mould surface. The method further comprises clamping the mould to the windward surface and/or to the leeward surface of the blade shell using a clamping arrangement spaced from the leading edge in a chordwise direction. The method further comprises providing an edge sealing arrangement positioned between the leading edge and the clamping arrangement in the chordwise direction, and forming a seal between the mould surface and the windward and leeward surfaces of the blade shell using the edge sealing arrangement to define windward and leeward edges of the C-shaped cavity. The mould surface is substantially tangential to the windward and leeward surfaces at the windward and leeward edges such that the C-shaped cavity tapers in thickness towards the windward and leeward edges of the C-shaped cavity. The method further comprises supplying polymer to the C-shaped cavity to form a leading edge protection shield on the blade shell.

IPC 8 full level

[B29C 39/42](#) (2006.01); [B29C 33/50](#) (2006.01)

CPC (source: EP US)

[B29C 33/0011](#) (2013.01 - EP); [B29C 33/0038](#) (2013.01 - EP); [B29C 33/10](#) (2013.01 - EP); [B29C 33/50](#) (2013.01 - EP);
[B29C 39/42](#) (2013.01 - EP); [B29C 45/14336](#) (2013.01 - US); [B29C 45/26](#) (2013.01 - US); [B29C 45/2608](#) (2013.01 - US);
[B29C 45/67](#) (2013.01 - US); [B29C 70/76](#) (2013.01 - EP); [B29D 99/0028](#) (2013.01 - EP); [F03D 1/0675](#) (2013.01 - EP);
[B29K 2063/00](#) (2013.01 - US); [B29K 2075/00](#) (2013.01 - US); [B29K 2083/00](#) (2013.01 - US); [B29L 2031/085](#) (2013.01 - EP US);
[F03D 1/0688](#) (2023.08 - US); [F05B 2230/90](#) (2013.01 - EP); [F05B 2240/303](#) (2020.08 - EP US); [Y02E 10/72](#) (2013.01 - EP);
[Y02P 70/50](#) (2015.11 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)

[WO 2022262921 A1 20221222](#); CN 117751030 A 20240322; EP 435545 A1 20240424; US 2024286327 A1 20240829

DOCDB simple family (application)

[DK 2022050128 W 20220616](#); CN 202280053209 A 20220616; EP 22735775 A 20220616; US 202218571685 A 20220616